

eW Reach Powercore gen2

Date: _____
Type: _____
Firm Name: _____
Project: _____

4000 K, 43° Spread Lens, UL/CE

Exterior long-throw floodlight with single temperature white light

eW Reach Powercore gen2 high-performance LED luminaires are premium exterior long-throw dynamic high-quality white luminaires for lighting tall buildings, bridges, and iconic structures. eW Reach Powercore gen2 outputs washes of white light in color temperatures ranging from a warm 2700 K to a cool 6500 K. A full range of accessories allow for customizable beam angles for floodlighting, spotlighting, wall washing, and grazing, along with the efficiency and cost-effectiveness of Powercore technology in a rugged die-cast aluminium housing.



- Multiple options for design flexibility—Luminaires are available in a warm 2700 K or a cool 4000 K. Custom configurations with custom channels of white or color LED sources are also available to support special applications.
- Superior color consistency and accuracy—Optibin, an advanced binning algorithm, sets a new standard for the color consistency and uniformity of LED sources used in manufacturing resulting in color consistency within 2 SDCM.
- Digital Dimming—Smooth dimming down to 1% with optional Data Enabler Pro and digital control interface.
- Unparalleled light output—eW Reach Powercore gen2 offers unprecedented output and punch for LED-based illumination of large-scale structures and objects.
- Expanded customization with a wide range of new accessory options. To complement the native 5° lens, six standard secondary spread lenses can customize the luminaire to produce 8°, 13°, 23°, 43°, 63°, and 5° x 17° (asymmetric) beam angles. The option to add or combine a louver, full glare shield, or half glare shield creates new aesthetic possibilities for designers and architects.
- Integrates patented Powercore technology that controls power output to luminaires directly from line voltage – rapidly, efficiently, and accurately. The Color Kinetics Data Enabler Pro merges line voltage with control data and delivers them to luminaires over a single standard cable, dramatically simplifying installation and lowering total system cost.
- Simple luminaire positioning—Rugged, slim-profile mounting bracket allows simple positioning and luminaire rotation through a full 360°. Side locking bolts reliably secure luminaire with a standard wrench.
- Universal power input range of 100 to 277 VAC.

For detailed product information, please refer to the Reach Powercore Family Product Guide at www.colorkinetics.com/global/products/essentialwhite/ewreach/

Specifications

Due to continuous improvements and innovations, specifications may change without notice.

Output

| | |
|---|--------|
| Color Temperature* | 4000 K |
| Beam Angle | 43° |
| Lumens (half unit)† | 6,500 |
| Lumens (no spread lens, full unit)* | 14,646 |
| Efficacy (lm/W) (half unit) | 51.5 |
| Efficacy (lm/W) (no spread lens, Full unit) | 60.9 |
| CRI | 79.5 |

Electrical

| | |
|---|---|
| Input Voltage | 100 to 277 VAC, auto-ranging, 50/60 Hz |
| Power Consumption (Maximum at full output, steady state) | 250 W |
| Power Factor | 0.99 (no spread lens, full unit, all channels full on) @ 120 VAC |

For Surge Protection Requirements for LED Lighting Systems, please refer to www.colorkinetics.com/KB/surge-protection.

Control

Dimmer

| | |
|---|--|
| On/Off; digital dimming by 4 connector cable & DE Pro | |
| Remote Monitoring & Management | ActiveSite Ready, works with Interact Landmark |

Lumen Maintenance

| Threshold§ | Ambient Temperature | Reported¶ | Calculated¶ |
|-----------------|---------------------|-----------|-------------|
| L ₉₀ | 25 °C | 42,300 | |
| | 50 °C | 42,300 | |
| L ₈₀ | 25 °C | | 100,000 |
| | 50 °C | | 100,000 |
| L ₇₀ | 25 °C | | 100,000 |
| | 50 °C | | 100,000 |

Physical

| | |
|--|--|
| Dimensions (Height x Width x Depth) | 522 x 733 x 158 mm (20.5 x 28.9 x 6.2 in) |
| Weight | 34 kg (75 lb) |
| Effective Projected Area (EPA) | 0.420 m ² |
| Housing Material | Die-cast aluminium, powder-coated finish |
| Lens | Tempered glass |
| Luminaire Connections | Integral male/female waterproof connectors |

Temperature Ranges

| |
|--|
| -40 to 50 °C (-40 to 122 °F) Operating |
| -20 to 50 °C (-4 to 122 °F) Startup |
| -40 to 80 °C (-40 to 176 °F) Storage |

| | |
|-------------------|--------------------------|
| Mechanical Impact | IK07 |
| Humidity | 0 to 95%, non-condensing |

Luminaire Run Lengths

To calculate luminaire run lengths and total power consumption for your specific installation, download the Configuration Calculator from www.colorkinetics.com/support/install_tool/

Certification and Safety

| | |
|-------------|------------------------------|
| Approbation | UL/cUL, FCC Class A, CE, PSE |
| Environment | Dry/Damp/Wet Location, IP66 |



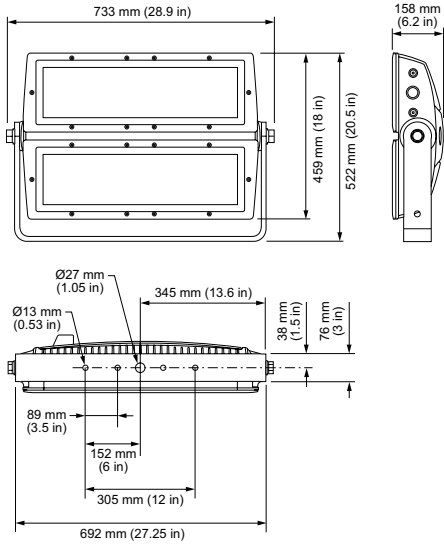
* Correlated color temperature (CCT) complies with ANSI C78.377-2008 for the chromaticity of solid state lighting products.

† Lumen measurement complies with IES LM-79-08 testing procedures.

§ L_{xx} = xx% lumen maintenance (when light output drops below xx% of initial output). All values are given at B10, or the median value where 90% of the LED population is better than the reported or calculated lumen maintenance measurement.

¶ Lumen maintenance figures are based on lifetime prediction graphs supplied by LED source manufacturers. Whenever possible, figures use measurements that comply with IES LM-80-08 testing procedures. In accordance with TM-21-11, Reported values represent the interpolated value based on six times the LM-80-08 total test duration (in hours). Calculated values represent time durations that exceed six times the total test duration.

Dimensions



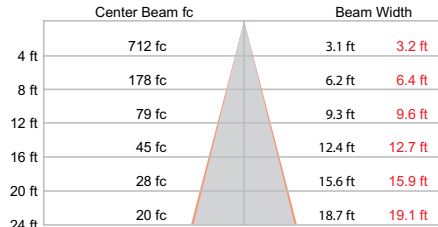
Photometrics, 43° Spread Lens, half unit

Photometric data is based on test results from an independent NIST traceable testing lab. IES data is available at www.colorkinetics.com/support/ies.

| | |
|-----------------------------|--------|
| Beam Angle | 43° |
| LED | 4000 K |
| Lumens (half unit) | 6,500 |
| Efficacy (lm/W) (half unit) | 51.5 |

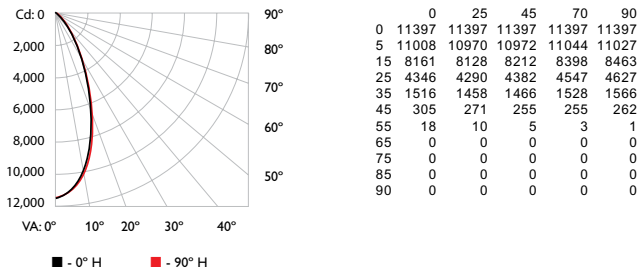


Illuminance at Distance



106.5 ft (32.5 m)
1 fc maximum distance
Vert. Spread: 42.5°
Horiz. Spread: 43.4°

Polar Candela Distribution



Zonal Lumen

| Zone | Lumens | % Luminaire |
|--------|---------|-------------|
| 0-30 | 5,258.5 | 80.9% |
| 0-40 | 6,230.3 | 95.8% |
| 0-60 | 6,500.3 | 100.0% |
| 0-90 | 6,500.3 | 100.0% |
| 60-90 | 0.0 | 0.0% |
| 70-100 | 0.0 | 0.0% |
| 90-120 | 0.0 | 0.0% |
| 90-180 | 0.0 | 0.0% |
| 0-180 | 6,500.3 | 100.0% |

For lux multiply fc by 10.7

Coefficients of Utilization - Zonal Cavity Method

| RCC %: | Effective Floor Cavity Reflectance: 20% | | | | | | | | | | | | | | | | | | | | | | | |
|--------|---|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | 80 | | | | 70 | | | | 50 | | | | 30 | | | | 10 | | | | 0 | | | |
| RW %: | 70 | 50 | 30 | 0 | 70 | 50 | 30 | 0 | 50 | 30 | 20 | 0 | 50 | 30 | 20 | 0 | 50 | 30 | 20 | 0 | 50 | 30 | 20 | 0 |
| 0 | 1.19 | 1.19 | 1.19 | 1.19 | 1.16 | 1.16 | 1.16 | 1.00 | 1.11 | 1.11 | 1.11 | 1.06 | 1.06 | 1.06 | 1.06 | 1.02 | 1.02 | 1.02 | 1.02 | 1.00 | 1.02 | 1.02 | 1.02 | 1.00 |
| 1 | 1.14 | 1.11 | 1.09 | 1.07 | 1.12 | 1.09 | 1.07 | 0.95 | 1.05 | 1.04 | 1.02 | 1.02 | 1.00 | 1.00 | 0.99 | 0.98 | 0.97 | 0.96 | 0.95 | 0.95 | 0.98 | 0.97 | 0.96 | 0.95 |
| 2 | 1.09 | 1.05 | 1.01 | 0.98 | 1.07 | 1.03 | 1.00 | 0.90 | 1.00 | 0.97 | 0.95 | 0.97 | 0.95 | 0.93 | 0.94 | 0.92 | 0.91 | 0.91 | 0.91 | 0.89 | 0.94 | 0.92 | 0.91 | 0.89 |
| 3 | 1.04 | 0.98 | 0.94 | 0.90 | 1.02 | 0.97 | 0.93 | 0.85 | 0.94 | 0.91 | 0.88 | 0.92 | 0.89 | 0.87 | 0.90 | 0.87 | 0.85 | 0.85 | 0.85 | 0.84 | 0.90 | 0.87 | 0.85 | 0.84 |
| 4 | 1.00 | 0.93 | 0.88 | 0.84 | 0.98 | 0.92 | 0.87 | 0.80 | 0.90 | 0.86 | 0.82 | 0.88 | 0.84 | 0.82 | 0.85 | 0.83 | 0.81 | 0.81 | 0.81 | 0.79 | 0.85 | 0.83 | 0.81 | 0.79 |
| 5 | 0.95 | 0.88 | 0.82 | 0.78 | 0.94 | 0.87 | 0.82 | 0.76 | 0.85 | 0.81 | 0.77 | 0.83 | 0.80 | 0.77 | 0.82 | 0.79 | 0.76 | 0.75 | 0.75 | 0.75 | 0.82 | 0.79 | 0.76 | 0.75 |
| 6 | 0.91 | 0.83 | 0.78 | 0.74 | 0.90 | 0.82 | 0.77 | 0.72 | 0.81 | 0.76 | 0.73 | 0.79 | 0.76 | 0.73 | 0.78 | 0.75 | 0.72 | 0.71 | 0.71 | 0.71 | 0.78 | 0.75 | 0.72 | 0.71 |
| 7 | 0.87 | 0.79 | 0.73 | 0.70 | 0.86 | 0.78 | 0.73 | 0.68 | 0.77 | 0.72 | 0.69 | 0.76 | 0.72 | 0.69 | 0.75 | 0.71 | 0.68 | 0.67 | 0.67 | 0.67 | 0.75 | 0.71 | 0.68 | 0.67 |
| 8 | 0.83 | 0.75 | 0.69 | 0.66 | 0.82 | 0.74 | 0.69 | 0.65 | 0.73 | 0.69 | 0.65 | 0.72 | 0.68 | 0.65 | 0.71 | 0.68 | 0.65 | 0.65 | 0.64 | 0.71 | 0.68 | 0.65 | 0.64 | |
| 9 | 0.80 | 0.71 | 0.66 | 0.62 | 0.79 | 0.71 | 0.66 | 0.62 | 0.70 | 0.65 | 0.62 | 0.69 | 0.65 | 0.62 | 0.68 | 0.64 | 0.62 | 0.62 | 0.60 | 0.68 | 0.64 | 0.62 | 0.60 | |
| 10 | 0.77 | 0.68 | 0.63 | 0.59 | 0.76 | 0.68 | 0.63 | 0.59 | 0.67 | 0.62 | 0.59 | 0.66 | 0.62 | 0.59 | 0.65 | 0.61 | 0.59 | 0.58 | 0.58 | 0.65 | 0.61 | 0.59 | 0.58 | |

Photometrics, 5° native (no spread lens), full unit

Photometric data is based on test results from an independent NIST traceable testing lab. IES data is available at www.colorkinetics.com/support/ies.

| | |
|---|--------|
| Beam Angle | 5° |
| LED | 4000 K |
| Lumens (no spread lens, full unit) | 14,646 |
| Efficacy (lm/W) (no spread lens, Full unit) | 60.9 |

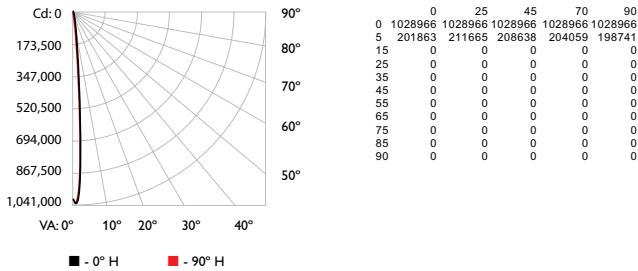


Illuminance at Distance

| | Center Beam fc | Beam Width |
|-------|----------------|---------------|
| 4 ft | 64,310 fc | 0.4 ft 0.4 ft |
| 8 ft | 16,078 fc | 0.9 ft 0.8 ft |
| 12 ft | 7,146 fc | 1.4 ft 1.3 ft |
| 16 ft | 4,019 fc | 1.9 ft 1.7 ft |
| 20 ft | 2,572 fc | 2.3 ft 2.1 ft |
| 24 ft | 1,786 fc | 2.8 ft 2.5 ft |

1,015 ft (309.4 m) ■ Vert. Spread: 6.7°
 1 fc maximum distance ■ Horiz. Spread: 6.1°

Polar Candela Distribution



Zonal Lumen

| Zone | Lumens | % Luminaire |
|--------|----------|-------------|
| 0-30 | 15,025.9 | 100.0% |
| 0-40 | 15,025.9 | 100.0% |
| 0-60 | 15,025.9 | 100.0% |
| 0-90 | 15,025.9 | 100.0% |
| 60-90 | 0.0 | 0.0% |
| 70-100 | 0.0 | 0.0% |
| 90-120 | 0.0 | 0.0% |
| 90-180 | 0.0 | 0.0% |
| 0-180 | 15,025.9 | 100.0% |

For lux multiply fc by 10.7

Coefficients Of Utilization - Zonal Cavity Method

| RCC %: | Effective Floor Cavity Reflectance: 20% | | | | | | | | | | | | | | | | | |
|--------|---|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | 80 | 70 | 50 | 30 | 10 | 0 | 80 | 70 | 50 | 30 | 10 | 0 | | | | | | |
| RW %: | 70 | 50 | 30 | 20 | 50 | 30 | 20 | 50 | 30 | 20 | 50 | 30 | 20 | 0 | | | | |
| RCR: | 0 | 1.19 | 1.19 | 1.19 | 1.16 | 1.16 | 1.16 | 1.00 | 1.11 | 1.11 | 1.11 | 1.06 | 1.06 | 1.06 | 1.02 | 1.02 | 1.00 | |
| 1 | 1.17 | 1.15 | 1.14 | 1.13 | 1.14 | 1.13 | 1.12 | 1.00 | 1.09 | 1.08 | 1.08 | 1.06 | 1.05 | 1.05 | 1.02 | 1.02 | 1.00 | |
| 2 | 1.15 | 1.12 | 1.11 | 1.09 | 1.13 | 1.11 | 1.09 | 1.00 | 1.08 | 1.07 | 1.05 | 1.05 | 1.04 | 1.03 | 1.03 | 1.02 | 1.01 | 1.00 |
| 3 | 1.13 | 1.10 | 1.08 | 1.06 | 1.12 | 1.09 | 1.07 | 1.00 | 1.07 | 1.05 | 1.04 | 1.05 | 1.03 | 1.02 | 1.03 | 1.02 | 1.01 | 1.00 |
| 4 | 1.12 | 1.09 | 1.06 | 1.05 | 1.11 | 1.08 | 1.06 | 1.00 | 1.06 | 1.04 | 1.03 | 1.04 | 1.03 | 1.02 | 1.03 | 1.02 | 1.01 | 1.00 |
| 5 | 1.11 | 1.07 | 1.05 | 1.04 | 1.10 | 1.07 | 1.05 | 1.00 | 1.05 | 1.04 | 1.02 | 1.04 | 1.03 | 1.02 | 1.03 | 1.02 | 1.01 | 1.00 |
| 6 | 1.10 | 1.07 | 1.04 | 1.03 | 1.09 | 1.06 | 1.04 | 1.00 | 1.05 | 1.03 | 1.02 | 1.04 | 1.02 | 1.01 | 1.03 | 1.02 | 1.01 | 1.00 |
| 7 | 1.09 | 1.06 | 1.04 | 1.02 | 1.08 | 1.05 | 1.03 | 1.00 | 1.04 | 1.03 | 1.01 | 1.04 | 1.02 | 1.01 | 1.03 | 1.02 | 1.01 | 1.00 |
| 8 | 1.08 | 1.05 | 1.03 | 1.02 | 1.08 | 1.05 | 1.03 | 1.00 | 1.04 | 1.02 | 1.01 | 1.03 | 1.02 | 1.01 | 1.03 | 1.01 | 1.01 | 1.00 |
| 9 | 1.08 | 1.05 | 1.03 | 1.01 | 1.07 | 1.04 | 1.02 | 1.00 | 1.04 | 1.02 | 1.01 | 1.03 | 1.02 | 1.01 | 1.03 | 1.01 | 1.00 | 1.00 |
| 10 | 1.07 | 1.04 | 1.02 | 1.01 | 1.07 | 1.04 | 1.02 | 1.00 | 1.03 | 1.02 | 1.01 | 1.03 | 1.02 | 1.01 | 1.03 | 1.01 | 1.00 | 1.00 |

Luminaire and Accessories

Use Item Number when ordering in North America

Luminaire

| | Item Number | Item 12NC |
|---------------------------------------|---------------|--------------|
| eW Reach Powercore gen2 4000 K, UL/CE | 523-000093-15 | 912400133466 |

Luminaire only. Values in this specification sheet represent both the luminaire and spread lens combined. Spread lens available below in Associated Part.

Associated Part

| | | |
|---|---------------|--------------|
| 43° Spread lens with bezel <i>Trim bezel included.</i> | 120-000068-14 | 912400133595 |
|---|---------------|--------------|

Accessories

| | | |
|---|---------------|--------------|
| 3 Conductor Leader Cable, UL/cUL, 3 m (10 ft) | 108-000056-03 | 910503704071 |
| 3 Conductor Leader Cable, CE, 3 m (10 ft) | 108-000056-04 | 910503704072 |
| 3 Conductor Leader Cable, UL/cUL, 15.2 m (50 ft) | 108-000056-00 | 910503703138 |
| 3 Conductor Leader Cable, CE, 15.2 m (50 ft) | 108-000056-01 | 910503704069 |
| 4 Conductor Leader Cable (required to digitally dim unit, w/DE Pro), UL/cUL, 3 m (10 ft) | 108-000055-03 | 910503704066 |
| 4 Conductor Leader Cable (required to digitally dim unit, w/DE Pro), CE, 3 m (10 ft) | 108-000055-04 | 910503704067 |
| 4 Conductor Leader Cable (required to digitally dim unit, w/DE Pro), UL/cUL, 15.2 m (50 ft) | 108-000055-00 | 910503703137 |
| 4 Conductor Leader Cable (required to digitally dim unit, w/DE Pro), CE, 15.2 m (50 ft) | 108-000055-01 | 910503704064 |
| Louver | 120-000187-02 | 912400133589 |
| Half Glare Shield | 120-000187-01 | 912400133588 |
| Full Glare Shield | 120-000187-00 | 912400133587 |
| Trim Bezel | 120-000187-03 | 912400134263 |
| 8° Spread lens with bezel | 120-000068-17 | 912400133598 |
| 13° Spread lens with bezel | 120-000068-12 | 912400133593 |
| 23° Spread lens with bezel | 120-000068-13 | 912400133594 |
| 63° Spread lens with bezel | 120-000068-15 | 912400133596 |
| 5° x 17° Spread lens with bezel | 120-000068-16 | 912400133597 |

Luminaire and Accessories (cont.)

Use Item Number when ordering in North America

| | Item Number | Item 12NC |
|--|---------------|--------------|
| Power Supplies | | |
| Data Enabler Pro (required to digitally dim unit), PG21/PG13 (metric size conduit) | 106-000004-01 | 910503701211 |
| Data Enabler Pro, PG21/PG13 (metric size conduit) | 106-000004-01 | 910503701211 |



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Color Kinetics
www.colorkinetics.com/global/products/essentialwhite/ewreach/